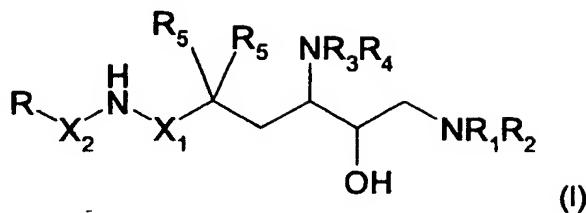


Claims:

1. Compound of the formula



where

R_1 is a) hydrogen, hydroxyl or amino; or

is b) $\text{C}_1\text{-C}_8$ -alkyl, $\text{C}_3\text{-C}_8$ -cycloalkyl, $\text{C}_1\text{-C}_8$ -alkanoyl, $\text{C}_1\text{-C}_8$ -alkoxycarbonyl, aryl- $\text{C}_0\text{-C}_4$ -alkyl or heterocycl- $\text{C}_0\text{-C}_4$ -alkyl, which radicals may be substituted by 1-4 $\text{C}_1\text{-C}_8$ -alkyl, halogen, cyano, oxide, oxo, trifluoromethyl, $\text{C}_1\text{-C}_8$ -alkoxy, $\text{C}_1\text{-C}_8$ -alkoxycarbonyl, aryl or heterocycl;

R_2 is a) $\text{C}_1\text{-C}_8$ -alkyl, $\text{C}_3\text{-C}_8$ -cycloalkyl, $\text{C}_1\text{-C}_8$ -alkylsulphonyl, $\text{C}_3\text{-C}_8$ -cycloalkylsulphonyl, aryl- $\text{C}_0\text{-C}_8$ -alkylsulphonyl, heterocyclsulphonyl, $\text{C}_3\text{-C}_{12}$ -cycloalkyl- $\text{C}_1\text{-C}_8$ -alkanoyl, $\text{C}_3\text{-C}_{12}$ -cycloalkyl- $\text{C}_3\text{-C}_8$ -cycloalkanoyl, aryl- $\text{C}_1\text{-C}_8$ -alkanoyl, aryl- $\text{C}_3\text{-C}_8$ -cycloalkanoyl, $\text{C}_1\text{-C}_8$ -alkanoyl, $\text{C}_1\text{-C}_8$ -alkoxycarbonyl, optionally N-mono- or N,N-di- $\text{C}_1\text{-C}_8$ -alkylated carbamoyl- $\text{C}_0\text{-C}_8$ -alkyl, aryl- $\text{C}_0\text{-C}_4$ -alkyl or heterocycl- $\text{C}_0\text{-C}_4$ -alkyl, which radicals may be substituted by 1-4 $\text{C}_1\text{-C}_8$ -alkyl, $\text{C}_3\text{-C}_8$ -cycloalkyl, $\text{C}_3\text{-C}_8$ -cycloalkoxy, amino, $\text{C}_1\text{-C}_6$ -alkylamino, di- $\text{C}_1\text{-C}_6$ -alkylamino, $\text{C}_0\text{-C}_6$ -alkylcarbonylamino, halogen, cyano, hydroxyl, oxide, oxo, trifluoromethyl, $\text{C}_1\text{-C}_8$ -alkoxy, optionally N-mono- or N,N-di- $\text{C}_1\text{-C}_8$ -alkylated carbamoyl, $\text{C}_1\text{-C}_8$ -alkoxycarbonyl, $\text{C}_1\text{-C}_6$ -alkylene-dioxy, aryl or heterocycl; or

is b) together with R_1 and the nitrogen atom to which they are bonded, a saturated or partly unsaturated 4-8-membered heterocyclic ring which may contain an additional nitrogen, oxygen or sulphur atom or an -SO- or -SO2- group, in which case the additional nitrogen atom may optionally be substituted by $\text{C}_1\text{-C}_8$ -alkyl, $\text{C}_1\text{-C}_8$ -alkanoyl, $\text{C}_1\text{-C}_8$ -alkoxycarbonyl, aryl or heterocycl radicals, and this heterocyclic ring may be part of a bicyclic or tricyclic ring system having a total of up to 16 members, and the second ring may also contain a nitrogen, oxygen or sulphur atom or an -SO- or -SO2- group, and the nitrogen atom of the second ring may optionally be substituted by $\text{C}_1\text{-C}_8$ -alkyl, $\text{C}_1\text{-C}_8$ -alkanoyl, $\text{C}_1\text{-C}_8$ -alkoxycarbonyl, aryl or heterocycl radicals and all ring systems mentioned may be substituted by 1-4 $\text{C}_1\text{-C}_8$ -alkyl, halogen, hydroxyl, oxide, oxo, trifluoromethyl, $\text{C}_1\text{-C}_8$ -alkoxy, $\text{C}_1\text{-C}_8$ -alkoxy-C₁-C₈-alkyl, $\text{C}_1\text{-C}_8$ -alkoxy-C₁-C₈-alkoxy, $\text{C}_1\text{-C}_8$ -alkoxycarbonylamino, $\text{C}_1\text{-C}_8$ -alkylcarbonylamino, $\text{C}_1\text{-C}_8$ -alkyl-

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amino, N,N-di-C₁-C₈-alkylamino, aryl-C₀-C₄-alkyl, aryloxy-C₀-C₄-alkyl, aryl-C₀-C₄-alkyl-C₁-C₈-alkoxy, aryloxy-C₀-C₄-alkyl-C₁-C₈-alkoxy, heterocyclyl-C₀-C₄-alkyl, heterocyclyloxy-C₀-C₄-alkyl, heterocyclyl-C₀-C₄-alkyl-C₁-C₈-alkoxy or heterocyclyloxy-C₀-C₄-alkyl-C₁-C₈-alkoxy; R₃ is hydrogen, C₁-C₈-alkyl, C₁-C₈-alkoxycarbonyl or C₁-C₈-alkanoyl; R₄ is hydrogen, C₁-C₈-alkyl, C₁-C₈-alkoxycarbonyl or C₁-C₈-alkanoyl; R₅ are each independently hydrogen or C₁-C₈-alkyl, or, together with the carbon atom to which they are bonded, are a C₃-C₈-cycloalkylidene radical; R is an optionally substituted unsaturated carbocyclic or heterocyclic radical; one of the X₁ and X₂ radicals is carbonyl and the other is methylene; or salt or prodrug thereof, or where one or more atoms are replaced by their stable, non-radioactive isotopes.

2. Compound of the formula I according to Claim 1, where

R₁ is a) hydrogen; or

is b) C₁-C₈-alkyl or C₃-C₈-cycloalkyl;

R₂ is a) C₁-C₈-alkyl, C₃-C₈-cycloalkyl, C₁-C₈-alkanoyl, heterocyclyl-C₁-C₈-alkanoyl, C₃-C₁₂-cycloalkyl-C₁-C₈-alkanoyl or aryl-C₁-C₈-alkanoyl, which radicals may be substituted by 1-4 C₁-C₈-alkyl, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkoxy, C₁-C₈-alkylamino, cyano, halogen, hydroxyl, oxide, C₀-C₆-alkylcarbonylamino, C₁-C₈-alkoxy, oxo, trifluoromethyl or aryl; or

is b) together with R₁ and the nitrogen atom to which they are bonded, a saturated or partly unsaturated, 4-8-membered, heterocyclic ring which may contain an additional nitrogen or oxygen atom, in which case the additional nitrogen atom may optionally be substituted by C₁-C₈-alkyl or C₁-C₈-alkanoyl, and this heterocyclic ring may be part of a bicyclic or tricyclic ring system having a total of up to 16 members and the second ring may also contain a nitrogen or oxygen atom, and the nitrogen atom of the second ring may optionally be substituted by C₁-C₈-alkyl or C₁-C₈-alkanoyl, and all ring systems mentioned may be substituted by 1-4 C₁-C₈-alkyl, hydroxyl, oxo, oxide, C₁-C₈-alkoxy, C₁-C₈-alkoxy-C₁-C₈-alkoxy, C₁-C₈-alkylcarbonylamino or aryloxy-C₀-C₄-alkyl-C₁-C₈-alkoxy.

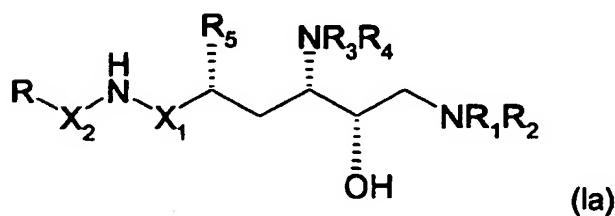
3. Compound of the formula I according to Claim 1, where

R is a 2-R_A-4-R_C-phenyl radical, 2-R_A-pyridin-3-yl radical or 3-R_A-pyridin-2-yl radical, where

R_A is C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl such as propyloxymethyl, morpholino- C_1 - C_4 -alkyl such as 2-morpholinoethyl or 3-morpholinopropyl, C_1 - C_8 -alkanoylpiperazino- C_1 - C_4 -alkyl such as N'-acetyl piperazinomethyl, C_1 - C_8 -alkoxy such as propyloxy, C_1 - C_4 -alkoxy- C_1 - C_5 -alkoxy such as 2-methoxyethoxy, 3-methoxypropoxy, 4-methoxybutyloxy or 5-methoxypentyloxy, C_1 - C_4 -alkoxy- C_2 - C_4 -alkenyloxy such as 4-methoxybut-2-enyloxy, C_1 - C_4 -alkoxy- C_1 - C_4 -alkoxy- C_1 - C_4 -alkoxy such as 2-(methoxymethoxy)ethoxy or 2-(2-methoxyethoxy)ethoxy, amino- C_1 - C_4 -alkoxy such as 2-aminoethoxy or 3-aminopropoxy, di- C_1 - C_4 -alkylamino- C_1 - C_4 -alkoxy such as 3-dimethylaminopropoxy, C_1 - C_8 -alkanoyl-amino- C_1 - C_4 -alkoxy such as N-acetyl aminoethoxy, C_1 - C_8 -alkanoyl-amino- C_1 - C_4 -alkyl such as N-acetyl aminoethyl, carbamoyl- C_1 - C_4 -alkoxy such as 2-carbamoylethoxy or carbamoyl, and

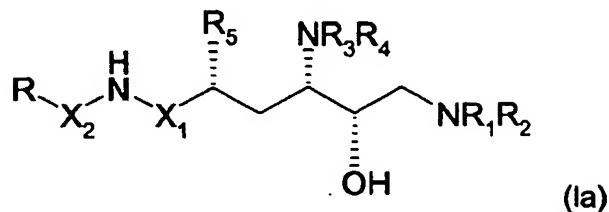
R_C is hydrogen, di- C_1 - C_4 -alkylamino- C_1 - C_4 -alkyl such as dimethylaminomethyl, piperidino- C_1 - C_4 -alkyl such as piperidinomethyl, pyrrolidino- C_1 - C_4 -alkyl such as pyrrolidinomethyl, morpholino- C_1 - C_4 -alkyl such as morpholinomethyl, C_1 - C_8 -alkanoylpiperazino- C_1 - C_4 -alkyl such as N'-acetyl piperazinomethyl, or C_1 - C_4 -alkylpiperazino- C_1 - C_4 -alkyl such as N'-methyl piperazinomethyl, morpholino, C_1 - C_4 -alkoxy such as methoxy, morpholino- C_1 - C_4 -alkoxy such as 2-morpholinoethoxy or 3-morpholinopropoxy, morpholino- C_1 - C_4 -alkylcarbamoyl- C_1 - C_4 -alkoxy such as 2-morpholinoethylcarbamoylmethoxy, piperidino- C_1 - C_4 -alkoxy such as 2-piperidinoethoxy, carboxyl, carbamoyl, C_1 - C_4 -alkylcarbamoyl such as methylcarbamoyl, carboxy- C_1 - C_4 -alkoxy such as carboxymethoxy, di- C_1 - C_4 -alkylamino- C_1 - C_4 -alkoxy, such as 3-dimethylaminopropoxy, C_1 - C_8 -alkylcarbamoyl- C_1 - C_4 -alkoxy such as butylcarbamoylmethoxy, or tetrazolyl- C_1 - C_4 -alkoxy, such as tetrazol-5-ylmethoxy,

4. Compound according to Claim 1 of the formula Ia



where R , R_1 , R_2 , R_3 , R_4 , R_5 , X_1 and X_2 are each as defined in Claim 1.

5. Compound according to Claim 1 of the formula Ia



where

R₁ is a) hydrogen; or

is b) C₁-C₈-alkyl or C₃-C₈-cycloalkyl;

R₂ is a) C₁-C₈-alkyl, C₃-C₈-cycloalkyl, C₁-C₈-alkanoyl, heterocycl-C₁-C₈-alkanoyl, C₃-C₁₂-cycloalkyl-C₁-C₈-alkanoyl or aryl-C₁-C₈-alkanoyl, which radicals may be substituted by 1-4 C₁-C₈-alkyl, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkoxy, C₁-C₆-alkylamino, cyano, halogen, hydroxyl, oxide, C₀-C₆-alkylcarbonylamino, C₁-C₈-alkoxy, oxo, trifluoromethyl or aryl; or

is b) together with R₁ and the nitrogen atom to which they are bonded, a saturated or partly unsaturated, 4-8-membered, heterocyclic ring which may contain an additional nitrogen or oxygen atom, in which case the additional nitrogen atom may optionally be substituted by C₁-C₈-alkyl or C₁-C₈-alkanoyl, and this heterocyclic ring may be part of a bicyclic or tricyclic ring system having a total of up to 16 members and the second ring may also contain a nitrogen or oxygen atom, and the nitrogen atom of the second ring may optionally be substituted by C₁-C₈-alkyl or C₁-C₈-alkanoyl, and all ring systems mentioned may be substituted by 1-4 C₁-C₈-alkyl, hydroxyl, oxo, oxide, C₁-C₈-alkoxy, C₁-C₈-alkoxy-C₁-C₈-alkoxy, C₁-C₈-alkylcarbonylamino or aryloxy-C₀-C₄-alkyl-C₁-C₈-alkoxy;

R₃ and R₄ are each hydrogen,

R₅ is C₁-C₄-alkyl, such as methyl or isopropyl,

R is a 2-R_A-4-R_C-phenyl radical, 2-R_A-pyridin-3-yl radical or 3-R_A-pyridin-2-yl radical,

where

R_A is C₁-C₄-alkoxy-C₁-C₄-alkyl such as propyloxymethyl, morpholino-C₁-C₄-alkyl such as 2-morpholinoethyl or 3-morpholinopropyl, C₁-C₈-alkanoylpiperazino-C₁-C₄-alkyl such as N'-acetyl piperazinomethyl, C₁-C₈-alkoxy such as propyloxy, C₁-C₄-alkoxy-C₁-C₅-alkoxy such as 2-methoxyethoxy, 3-methoxypropyloxy, 4-methoxybutyloxy or 5-methoxypentyloxy, C₁-C₄-alkoxy-C₂-C₄-alkenyloxy such as 4-methoxybut-2-enyloxy, C₁-C₄-alkoxy-C₁-C₄-alkoxy-C₁-C₄-alkoxy such as 2-(methoxy-methoxy)ethoxy or 2-(2-methoxyethoxy)ethoxy, amino-C₁-C₄-alkoxy such as

2-aminoethoxy or 3-aminopropoxy, di-C₁-C₄-alkylamino-C₁-C₄-alkoxy such as 3-dimethylaminopropoxy, C₁-C₈-alkanoyl-amino-C₁-C₄-alkoxy such as N-acetylaminoethoxy, C₁-C₈-alkanoyl-amino-C₁-C₄-alkyl such as N-acetylaminoethyl, carbamoyl-C₁-C₄-alkoxy such as 2-carbamoylethoxy or carbamoyl, and

R_c is hydrogen, di-C₁-C₄-alkylamino-C₁-C₄-alkyl such as dimethylaminomethyl, piperidino-C₁-C₄-alkyl such as piperidinomethyl, pyrrolidino-C₁-C₄-alkyl such as pyrrolidinomethyl, morpholino-C₁-C₄-alkyl such as morpholinomethyl, C₁-C₈-alkanoylpiperazino-C₁-C₄-alkyl such as N'-acetylpirazinomethyl, or C₁-C₄-alkylpiperazino-C₁-C₄-alkyl such as N'-methylpirazinomethyl, morpholino, C₁-C₄-alkoxy such as methoxy, morpholino-C₁-C₄-alkoxy such as 2-morpholinoethoxy or 3-morpholinopropoxy, morpholino-C₁-C₄-alkylcarbamoyl-C₁-C₄-alkoxy such as 2-morpholinoethylcarbamoylmethoxy, piperidino-C₁-C₄-alkoxy such as 2-piperidinoethoxy, carboxyl, carbamoyl, C₁-C₄-alkylcarbamoyl such as methylcarbamoyl, carboxy-C₁-C₄-alkoxy such as carboxymethoxy, di-C₁-C₄-alkylamino-C₁-C₄-alkoxy, such as 3-dimethylaminopropoxy, C₁-C₈-alkylcarbamoyl-C₁-C₄-alkoxy such as butylcarbamoylmethoxy, or tetrazolyl-C₁-C₄-alkoxy, such as tetrazol-5-ylmethoxy,

X₁ is methylene and X₂ is carbonyl,
or a salt thereof, in particular a pharmaceutically usable salt thereof.

6. Compound according to one of Claims 1-5 for use in a method for the therapeutic treatment of the human or animal body.

7. Pharmaceutical preparation comprising, as an active pharmaceutical ingredient, a compound according to one of Claim 1-5 in free form or as a pharmaceutically usable salt.

8. Use of a compound according to one of Claims 1-5 for preparing a pharmaceutical preparation having renin-inhibiting action.

9. Use of a compound according to one of Claims 1-5 for preparing a pharmaceutical preparation for the treatment or prevention of hypertension, heart failure, glaucoma, cardiac infarction, kidney failure or restenosis.